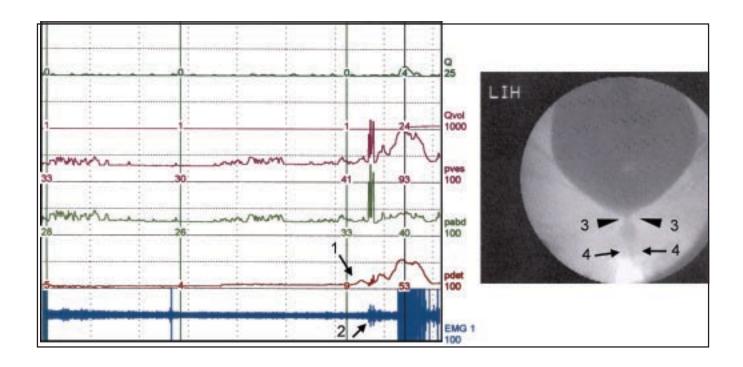
Dysfunctional Voiding and Bladder Neck Dysfunction

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BRIEF HISTORY

A 37 year-old woman had suffered from urgency frequency and incomplete emptying of the bladder for 3 years. She had been treated with an antimuscarinic agent (Detrusitol 4 mg QD) for more than 3 months but the lower urinary tract symptoms did not resolve completely.

CLINICAL INVESTIGATION

She was physically and neurologically healthy.

URODYNAMIC FINDINGS

Videourodynamic study (VUDS) revealed uninhibited detrusor contractions occurring at a volume of 200 mL (arrow 1) and she could not hold urine although the external sphincter activity was increased

(arrow 2). During the voiding phase, the detrusor pressure (Pdet) was 44 cm water, the maximal flow rate (Qmax) was 5 mL/s, and the post-void residual (PVR) was 160 mL. Voiding cystourethrography revealed a narrow bladder neck (arrow heads 3) and narrow distal urethra (arrows 4). The middle part of the urethra was, however, dilated.

CLINICAL DIAGNOSIS AND MANAGEMENT

The diagnosis for this VUDS tracing was dysfunctional voiding due to poor relaxation of the pelvic floor muscles. The bladder neck narrowing may be a primary bladder neck dysfunction or may be secondary to hypertrophied detrusor muscles. Cystoscopy is indicated to investigate the anatomical stricture. Biofeedback pelvic floor muscle training is indicated and an alpha-blocker might be helpful in relieving the bladder neck dysfunction.